

What is claimed is:

1. A method for forming an overcoat layer for a multilayer thermal imaging member comprising

(a) providing on the surface of a layer of the multilayer thermal imaging member a layer of an overcoat composition comprising an oligomer having an acrylate function and a photoinitiator; and

(b) subjecting said overcoat composition layer to a sufficient amount of ultraviolet or electron beam radiation to initiate a polymerization reaction whereby an overcoat layer is formed.

2. The method as defined in Claim 1 wherein step (b) comprises subjecting said overcoat composition layer to ultraviolet radiation of from about 200 watts/in<sup>2</sup> to about 400 watts/in<sup>2</sup> for from about 0.5 to about 0.5 second.

3. The method as defined in Claim 2 wherein step (b) is carried out in a chamber at a temperature of from about 40°C to about 60°C, substantially in the absence of oxygen.

4. The method as defined in Claim 3 wherein said overcoat layer is from about 1 μm to about 3 μm in thickness.

5. The method as defined in Claim 1 wherein said overcoat composition further includes a monomer having an acrylate function.

6. The method as defined in Claim 5 wherein said overcoat composition further includes a photosensitizer.

7. The method as defined in Claim 6 wherein said overcoat composition further include colloidal silica.

8. The method as defined in Claim 1 wherein said oligomer has from 2 to about 6 repeat acrylate units.

9. The method as defined in Claim 1 wherein said oligomer is an aliphatic urethane acrylate.

10. A multilayer thermal imaging member comprising a substrate carrying at least one color-forming layer and an overcoat layer overlying said color-forming layer, said overcoat layer being formed by the method as defined in Claim 1.

11. The multilayer thermal imaging member as defined in Claim 10, wherein a first side of said substrate carries at least two color-forming layers and said overcoat layer overlies said at least two color-forming layers.

8571-AFP

12. The multilayer thermal imaging member as defined in Claim 11, and further including a color-forming layer carried by a second side of said substrate.